P.W.
~~Marine~~ (1899) Department.

G.O., No. 379 I

DATED 27 April 1899

3/5/99

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[Despatch Abstract.]

Sengadivakkam Tank.

Estimate of Rs 7220 for improving and repairing do in the Chingleput Dt., sanctioned, with remarks

F.E.I.
1.5.99

[M.S. 1,000—28-10-98.]

13/6

## BACK PAPERS.

| G.O. | No. | Department. | Date. | G.O. | No. | Department. | Date. |
|---|---|---|---|---|---|---|---|
| | | | | | | | |

## FURTHER PAPERS.

| G.O. | No. | Department. | Date. | G.O. | No. | Department. | Date. |
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IRRIGATION.
ACCOUNT.

# Government {1899} of Madras.

## PUBLIC WORKS.

*Recd.* } 1899. *Enclosures*
*Regd.* *Spare copies*

## G.O., No. 379 I., 27th April 1899.

## APRIL.

**Sengadivakkam Tank**

Estimate of Rs. 7,220 for improving and repairing the — in the Chingleput division, sanctioned, with remark.

## GOVERNMENT OF MADRAS.

## PUBLIC WORKS DEPARTMENT.

### Irrigation.
### Account.

Read—the following papers:—

From Colonel C. C. RAWSON, R.E., Superintending Engineer, V Circle, to the Chief Engineer for Irrigation, dated Chepâk, 25th February 1899, No. 86 E.I.

I have the honour to submit for sanction the enclosed plans and estimate, amounting to Rs. 7,220, for improvements and repairs to Sengadivakkam tank No. 289, in the Conjeeveram taluk, Chingleput division.

The necessity for the work is explained in the report attached to the estimate.

### Enclosure.

Report to accompany the estimate for repairing the Sengadivakkam Tank, Imperial No. 289, in the Conjeeveram Taluk.

| Amount of estimate— | RS. |
|---|---|
| Repairs ... ... ... ... ... ... ... ... | 3,800 |
| Original works ... ... ... ... ... ... ... | 3,420 |

This is a large tank situated north-west of the village of the same name and about ½ mile south of the 38th mile of the road from Sriperumbudur to Conjeeveram.

2. It has a drainage area of 8·75 square miles, of which 7·50 appertain to the upper tanks. The discharge from this basin is 1,740 cubic feet per second. It also receives 166·50 cubic feet per second from Kuthiraikal vunka. Therefore, in all, it receives 1,906·50 cubic feet per second.

3. The tank has a calingula at the right flank 111½ feet long with dam stones 5 feet high. The effective length is 80·75 feet.

4. As regards the height of water retained on crest of the calingula, the evidence is very conflicting. Some state 3 feet, some 3½ to 4 feet, and the majority 5 feet or to full height of dam stones. The Tahsildar was requested to clear up the doubts, but the results of his investigation are no better and are in fact about the same as what our enquiries elicited. Therefore, for purposes of this estimate, the full tank level is taken as top of dam stones = + 47·44, the crest of the calingula being + 42·44.

5. The 1,906·50 cubic feet of drainage could be easily discharged by the calingula with a head of 3·80 feet, and hence M.W.L., if such it may be considered, would be 46·25. That is, during the severest part of the north-east monsoons, the water would not rise above 46·25 if the spaces between dam stones are kept clear, as it ought to be. The top of proposed bank will be 52·00 or 5·75 feet above this M.W.L. during strong weather. And after the strong part of the monsoon is over when water would be stored to level 47·44 (level of top of dam stones), there will still be 4½ feet of bund over it, and which is considered ample for the safety of the tank.

The Collector in his No. 1991 D. of 1898, dated 30th September 1898, has ordered that this is to be considered as F.T.L.

14th October 1898. (Signed) J. E. PAUL.

6. The bund is weak at both flanks and there is a breach at the left flank left open for no purpose.

7. The revetment which is only 1 foot thick is displaced from 3,975 feet to 6,130 feet (distances in long section).

8. The calingula is out of order, the wings and steps are cracked and the exposed surfaces require plastering and pointing. The lowest apron is washed away and a hole formed below.

9. There are three sluices to this tank, all out of order and irrepairable. Estimate with plans, &c., for reconstructing them is enclosed.

10. It is proposed to bring the top of bund to a uniform level of + 52·00, with top width of 6 feet and slopes 2 : 1 on both sides; to remove and rebuild the revetment with one-third new stone to bring it up to a thickness of 1½ feet with a gravel backing of 6 inches thickness; to remove the prickly-pear, palmyrah, &c., from the bund; and to repair the calingula by rebuilding cracked portions, plastering and pointing the wings and cutstone aprons and repacking the lowest rough stone apron with half new stone. Also constructing a retaining wall in the lowest apron to prevent it being washed away again—*vide* plan.

11. All work will be carried out in accordance with code standard specifications.

(Signed) R. J. P. ENRIGHT,
Sub-Divisional Officer, Mount Sub-division.

22nd July 1898.

### No. 84 I.

*Note by the Chief Engineer for Irrigation.*

The Superintending Engineer, V Circle, submits for sanction the accompanying estimate of Rs. 7,220 for repairing and improving Sengadivakkam tank, in the Chingleput division, which irrigates 1,082 acres yielding a revenue of Rs. 2,993. The estimate may be sanctioned. In executing the work screw shutters should be provided for sluices Nos. 2 and 3, and the bund should not be made in places where the ground is above the estimated flood level.

(Signed) W. HUGHES,
Chief Engineer for Irrigation.

8th April 1899.

Order—No. 379 I., dated 27th April 1899.

The following estimate is sanctioned :—

Irrigation.
43. Minor Works and Navigation.
Minor Works for which neither Capital nor Revenue Accounts are kept, P.W.D., Chingleput Division.
Improving and repairing Sengadivakkam Tank (No. 289 of the list of Minor Works, P.W.D., appended to G.O., No. 407 I., dated 6th July 1887).

| Estimate— | RS. |
|---|---|
| 1. Original works ... ... ... ... ... ... ... | 3,420 |
| 2. Repairs ... ... ... ... ... ... ... | 3,800 |
| Total ... | 7,220 |

2. This sanction is registered as No. 5 I. of 1899–1900.

3. The attention of the Superintending Engineer, V Circle, is drawn to the remarks of the Chief Engineer for Irrigation in the foregoing note.

(True Extract.)

Under Secretary to Government,
Irrigation Branch.

To the Chief Engineer for Irrigation.
„ Superintending Engineer, V Circle, with fourteen enclosures.
„ Examiner, Public Works Accounts.

Exd, T. K. Narayana Aiyangar.

# Public Works (1899) Department.

**CURRENT No.** 3380

3799

From The Chief Engineer for Irrigation

Order

3799

No. 84 I

*Dated* 8-4-99
*Received*
*Registered* 26-4-99
*Enclosures* 16 (7 Plans)
*Spare copies.*

## SUBJECT.

Sengadivakkam Tank — Estimat
of Rs 7220 for repairing and
improving — Note recom-
mending for sanction the

Stamped

mo
25/4/99

C.S.

BACK PAPERS.

| No. | Date. |
|---|---|

FURTHER PAPERS.

| No. | Date. |
|---|---|

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PUBLIC WORKS DEPARTMENT,
IRRIGATION BRANCH.

# PROCEEDINGS OF THE MADRAS GOVERNMENT.

Note recommending sanction to Este of Rs 7,220 for repairing and improving Sendgadivakkam Tank.

UNDER date the

READ the following

From the Supg: Engineer 5th Circle — No 86 E.I. of 25th Feb: 1899.
No 84 d/ 8-4-99

Note by the Chief Engineer for Irrigation.

The Supg: Engineer, 5th Circle, submits for sanction the accompanying estimate of Rs 7,220 for repairing and improving Sengadivakkam tank, in the Chengleput divisi which irrigates 1,082 acres yielding a revenue of Rs 2,993 The estimate ~~which includes provision for reconstructing three masonry sluices, now in bad order,~~ may be sanctioned. ~~with the remark~~ In executing the work ~~that~~ screw shutters should be provided for sluices Nos 2 and 3, and ~~that~~ the bun should not be made in

F.E.I.

Issue
W.H.
I

22-4-99

4 D

12

places where the ground is above the estimated flood level.

Order thereon No. 379 I/27.4.99

The following estimate is sanctioned:—

Irrigation

43. Minor works & Navigation
Minor works for which neither Capital nor Revenue accounts are kept P.W.D.

Chingleput division.

Improving and repairing Sengadivakkam tank (No. 289 of the list of minor works, P.W.D. appended to G.O. No. 407-I dated 6th July 1887).

|  |  | Rs |
|---|---|---|
| Estimate— | 1. Original works | 3420 |
|  | 2. Repairs | 3800 |
|  | Total | 7220 |

2. This sanction is registered as No. 5 I of 1899-1900.

3. The attention of the Supdg: Engineer, 5th Circle, is drawn to the remarks of the Chief Engineer for Irrigation in the foregoing note.

8/4/99

8.4.99

Irrign: Acct

Sanctioned
A.E.H.
21.4.99

12/5/99

with 14 enclosures

To, The Chief Engr for Irrign:
& Supdg: Engr 5th Circle
& Examiner P.W. accounts

ICW
7/4/99
6-4-99.

E. I. Form No. 1-1,066-21-4-98

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C.E.
6-3-99

# Public Works (1899) Department.

CURRENT No. 26 C.N.

From The Supg Engineer 5th Circle

No. 86 E.I.

Dated 25th February 1899

Received
Registered 1st March 99

Enclosures 14.

Spare copies

SUBJECT.

Sengadivakkam tank—
Conjeeveram Taluq—
Submits for sanction plans & estimates of Rs. 7220 for Improvements to—

Order El

May these be sanctioned after check

Sluices Nos. 2 & 3 seem to require ~~[illegible]~~ screw shutters—for No. 2—~~the~~ vent is 2'0" × 1'3" pressure with water at M.W.L. 1625 lbs or with C. of frictn. ·5 power reqd. to work 800 odd lbs—

2/3/99

Sanction with the remark that screw shutters should be provided for sluices 2 & 3 and that bunds should not be made in places where the ground is above the estimated flood level.

DEI

WH
4/3

ICW
1/3/99

Dr. Ph
Check the estimates

ICW
6/3/99

2.3.99

**BACK PAPERS.**

| No. | Date. |
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| | |

**FURTHER PAPERS.**

| No. | Date. |
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EXECUTIVE ENGINEER'S O
5794/52
12 DEC 1898
D.P.W.
CHINGLEPUT DIVISION

Report to accompany the estimate for repairing the Tengadiwakam Tank Imperial No. 289 in the Conjeeveram Taluq.

Amount of Estimate Rs 3800. Repa ~~4000~~ 345 O.W 3420

This is a large tank situated North west of the village of the same name and about ½ mile south of the 38th mile of the road from Streeperumbudur to Conjeeveram.

2 - It has a drainage area of 8.75 sq. miles of which 7.50 appertain to the upper tank. The discharge from this basin is 1770 1740 cft per second. It also receives 166.50 cft per second from Kutheraikal Vanka Therefore in all it receives ~~1937~~ 1906.50 cft. per second.

3 - The tank has a Calingulah at the right flank 111½ ft. long with dam stones 5 feet high. The effective length is 80.75 feet.

4 As regards the height of water retained on crest of the Calingulah the evidence is very conflicting. Some state 3 ft., some 3½ to 4 feet, and the majority 5 feet or to full height of dam stones. The Tahsildar was requested to clear up the doubts but the results of his investigation are no better and are in fact about the same as what our enquiries elicited -

Therefore

Therefore for purposes of this estimate the full tank level is taken as top of dam stones = + 47·44, the crest of the Calingulah being + 42·44.

5 The ~~1937~~ 1986·50 cft of drainage could be easily discharged by the calingulah with a head of 3·80 feet, and hence M.W.L, if such, it may be considered, would be 46·25. That is during the severest part of the N.E. Monsoons, the water would not rise above 46·25 if the spaces between dam stones are kept clear, as it ought to be. The top of proposed bund will be 52·00 or 5·75 feet above this M.W.L during strong weather. And after the strong part of the monsoon is over when water would be stored to level 47·44 (level of top of dam stones), there will still be 4½ feet of bund over it, and which is considered ample for the safety of the tank.

6 The bund is weak at both flanks and there is a breach at the left flank left open for no purpose.

7- The revetment which is only 1 foot thick is displaced from 3975 feet to 6130 feet (Distances in long section).

8. The Calingulah is out of order, the wings and steps are cracked and the exposed surfaces require plastering and pointing. The lowest apron is washed away and a hole formed below-

The Collector in his 1991D of 1898 dated 30.9.98 has ordered that this is to be considered as FTL

14/10 98 J S Paul

3 Sp

9 There are three Sluices to this tank all out of order and irrepairable. ~~Sections~~ Estimate is enclosed with plans for reconstructing them ~~have been submitted with No 288 d/ 13.5.98.~~

10 It is proposed to bring the top of bund to a uniform level of + 52·00, with top width of 6 feet and slopes 2:1 on both sides; to remove and rebuild the revetment with ⅓ new stone to bring it up to a thickness of 1½ feet with a gravel backing of 6 inches thickness, to remove the prickly pear, palmyrah & from the bund and to repair the Calingulah by rebuilding cracked portions, plastering and pointing the wings and cut stone aprons and repacking the lowest rough stone apron with ½ new stone. Also constructing a retaining wall in the lowest apron to prevent its being washed away again Vide plan.

11- All work will be carried out in accordance with Code Standard Specifications.

Sub Divl officer
Mount Sub Dn

22/7/98

SUPERINTENDING ENGR.
No. ..........
3 - FEB 1899
V CIRCLE, P.W.D., MADRAS.

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CHIEF ENGINEER
FOR IRRIGATION.
11 MAR 1899
6/26 C.N.

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3380/98

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No. 86 E.S.

SUPERINTENDING ENGINEER'S OFFICE,
V Circle, Madras,
Chepák, 25th February 1899.

10

From

Colonel C.C. Rawson R.E.
SUPERINTENDING ENGINEER,
V CIRCLE.

To

THE Chief Engineer,
for Irrigation.

CHIEF ENGINEER
FOR IRRIGATION.
11 MAR 1899
No. 26 C.N.

SIR,

I have the honour to submit for sanction the enclosed plans and estimate amounting to Rs 7220/. for improvements and repairs to Sengadivakam Tank No. 289 in the Conjeeveram Taluk, Chingleput Division.

The necessity for the work is explained in the report attached to the estimate.

I have the honour to be
Sir
your most obed.t Servant

25/2/99 Colonel R.E.
Supg. Engineer 5 Circle

Enclosures. 14

3 plans of masonry works
1 detail estimate
1 abstract estm.
} Rs 3420.

1 Group map
Tank plan
Level
plan of calingalah
1 Report
1 Data
1 Hydraulic Statement
1 detail Estimate
1 abstract Estimate
} Rs 3800

Rs 7220

23.2.99

Qu 8.16
3380/88

6P